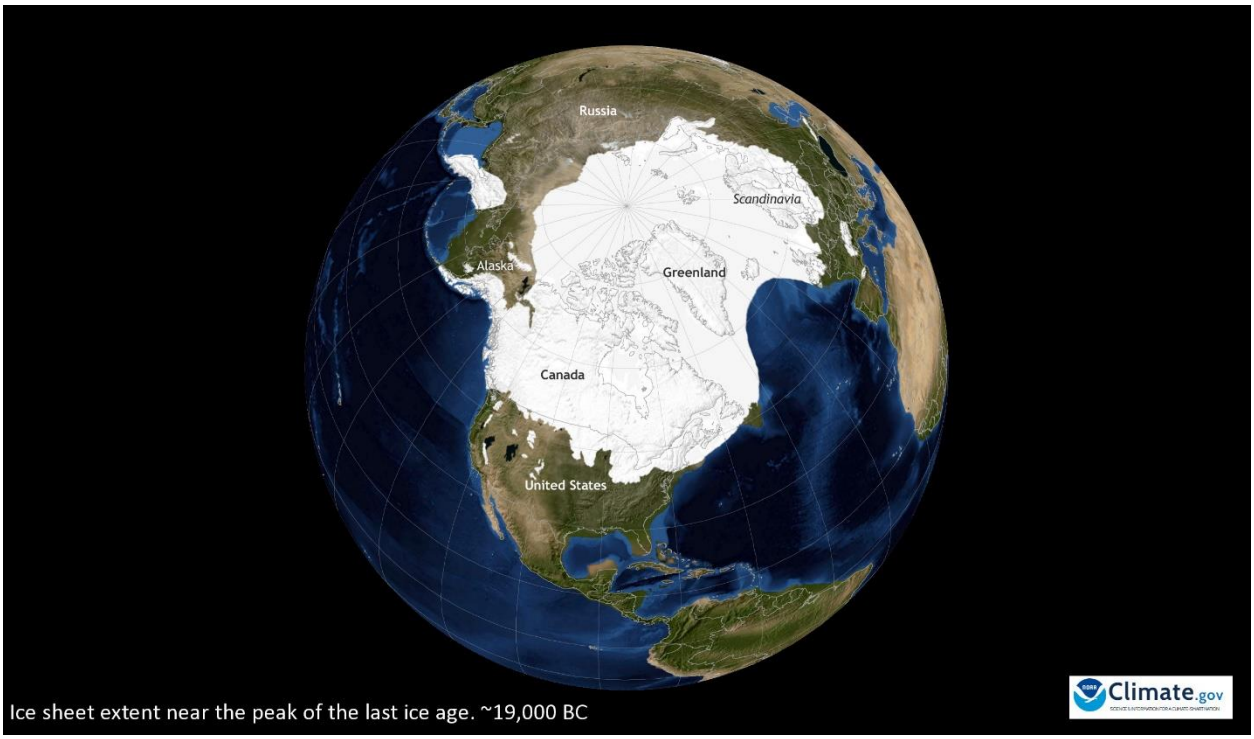
Climate at a Glance: CO2 and Preventing the Next Ice Age



Roughly 20,000 years ago, during the Last Glacial Maximum of the Pleistocene Ice Age, ice spread over much of North America and Eurasia. Image by Climate.gov based on data from the University of Zurich Applied Sciences, provided by Science on a Sphere. Original image from climate.gov resized and reformatted by A. Watts.

Key Takeaways:

- The next ice age glaciation will end civilization as we know it and will be far more devastating than any potential harms from a warming world.
- Our planet is overdue for the next glaciation.
- Peer-reviewed studies report carbon dioxide emissions are likely holding off the next glaciation, bringing far more benefit than any potential global warming harms.
- Reversing carbon dioxide emissions and returning to pre-industrial CO2 levels may well trigger the next ice age glaciation.

Short Summary:

For the past 3 million years, Earth has been in an ice age characterized by long periods of advancing ice sheets, called glaciations, interrupted by brief periods of interglacial warmth. Typically, the cold glaciations last approximately 100,000 years while the interglacial warm periods last approximately 10,000 years.[1] We are currently in an interglacial warm period that has lasted about 10,000 years and the next glaciation is overdue.[2]

During glaciations, ice sheets advance from the poles, destroying virtually all life in their wake. During the most recent glaciation, the Northern Hemisphere ice sheet covered all of Canada, parts of the

northern United States, much of Asia, and much of Europe. Even where ice sheets do not cover the land, a much colder climate makes crop production extremely difficult. Civilization as we know it will cease to exist when the next glaciation arrives.

Earth's orbital cycle recently entered the same phase that triggered the past several glaciation advances.[3,4] However, the ice sheets have yet to advance. Scientists report in peer-reviewed studies that Earth came very close, and indeed is still very close, to reaching a tipping point triggering the next glaciation, but carbon dioxide emissions from humans are a likely reason glaciation has yet to occur.[3,4] Scientists also report that ongoing carbon dioxide emissions may altogether prevent the next 100,000-year glaciation event and the devastation it will bring.[5,6]

Even in the unlikely event that climate activists' worst fears come true, those fears are still far preferable to the imminent onset of the next ice age glaciation, which may well happen if we return to pre-industrial carbon dioxide levels.

References:

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